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(54) Title: METHOD FOR PROVIDING A SUBSTRATE STRUCTURE FOR ORIENTED NEURITE OUTGROWTH, SUBSTRATE STRUCTURE, AND DEVICE FOR MONITORING NEURONS

(57) Abstract: The invention relates to a method for providing a substrate structure for oriented neurite outgrowth, wherein a basic substrate is provided, characterized in that at least one alignment layer is deposited on said substrate and a mono- or multi-layer of a liquid crystal material is deposited on said at least one alignment layer or a combined alignment layer is deposited on said substrate, thereby providing a structured surface.